WHAT IS CLAIMED:

1. A mobile routing device that communicates over multiple wireless networks with a Host Network Server residing on a Local Area Network, the mobile routing device also communicating with at least one client device, the mobile routing device comprising:

a plurality of router network adapters, each interfacing with one of the wireless networks to send and receive data from the wireless network and having a gateway address, associated with the wireless network, that the Host Network Server uses to send data to the mobile routing device; and

at least one client router network adapter that interfaces with the at least one client device, each client router network adapter being associated with an end point address that a sending application uses to send data to the client device;

wherein data is sent to the client device via the Host Network Server, via at least one of the wireless networks, and via the mobile routing device, using only the end point address so that a the sending application is unaware of the wireless networks used to transport the data and the corresponding gateway addresses.

2. The mobile routing device of claim 1 in which each client router network adapter and each router network adapter converts data from an internal protocol format to an outbound format for sending data and converts data from an incoming format in which received data is in the internal protocol format, and monitors the status of the associated wireless network and client communications link.

3. The mobile routing device of claim 2, in which the internal protocol comprises Internet Protocol.

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4. The mobile routing device of claim 2, further comprising a Router System Module that configures and launches each router network adapter, client router network adapter and a Router Module.

5. The mobile routing device of claim 2, in which each router network adapter sends a network control process message to a Router Module indicating whether the associated wireless network is operational.

6. The mobile routing device of claim 5, in which the Router Module selects one of the wireless networks from a plurality of candidate wireless networks for data transmission only when the Router Module has received the message indicating that the associated candidate wireless network is operational.

7. The mobile routing device of claim 6, in which the Local Area Network comprises at least one Host Application, the sending application further comprising the at least one Host Application.

8. The mobile routing device of claim 6, in which the Router Module generates a Route Registration packet and sends the Route Registration packet to the Host Network Server, when the Router Module has selected a new wireless network, the Route Registration packet comprising the gateway address of the new wireless network and the end point addresses that can be reached via the gateway address,

wherein the Host Network Server remains aware of all end point addresses that can be reached via the gateway address contained in the Route Registration packet.

9. The mobile routing device of claim 1, in which a second mobile routing device sends data to the mobile routing device via the Host Network Server using the end point address,

wherein the second mobile routing device sends data to the client device via the mobile routing device, via the Host Network Server, and at least one of the wireless networks using only the end point address so that the second mobile routing device is unaware of the wireless networks used to transport the data and the corresponding gateway addresses.

10. The mobile routing device of claim 1, further comprising a Router Configuration Module that reads in configuration data for each router network adapter and for each client router network adapter, the configuration data comprising the gateway addresses and the end point addresses.

11. The mobile routing device of claim 1, in which the gateway address comprises an IP address and the wireless network comprises an IP network.

12. The mobile routing device of claim 1, in which the gateway address comprises a hardware address and the wireless network comprises a non-IP network.

13. A method for routing data to a client device communicating with a mobile routing device via a Host Network Server and at least one of a plurality of wireless networks, the method comprising:

identifying the client device and a corresponding end point address;

forwarding the data to the Host Network Server using the end point address;

receiving the data at the Host Network Server;

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ascertaining a gateway address corresponding to the end point address, the gateway address being associated with a selected wireless network that was selected for communicating with the mobile routing device corresponding to the client device;

5   forwarding the data to the mobile routing device via the selected wireless network using the gateway address; and

forwarding the data from the mobile routing device to the client device based upon the end point address.

14.   The method of claim 13, in which the receiving further comprises:

10   receiving the data at a Network Interface from an originating wireless network;

saving a source hardware address and an end point hardware address, if the originating wireless network is a non-IP network;

forwarding the data to a Router Manager; and

15   analyzing the source hardware address, if the originating wireless network is a non-IP network; and

analyzing the source IP address, if the originating wireless network is an IP network.

15.   The method of claim 14, in which the analyzing further comprises:

20   determining whether the source address is present in a route table;

updating the route table to reflect that data has been received from the wireless network corresponding to the source address, if the source address is present in the route table; and

adding the source address to the route table, if the source address is not present in the route table.

16.   The method of claim 13, in which the receiving further comprises:

receiving the data at an IP stack from a Local Area Network; and

forwarding the data to a Router Manager.

17.   The method of claim 13, in which the ascertaining further comprises: determining a subnet that the end point address resides on, and looking up the gateway address in the route table based upon the subnet.

18.   The method of claim 13, in which the forwarding the data to the mobile routing device further comprises:

forwarding the data to a Network Interface;

translating the data to a format compatible with the wireless network, if the wireless network is a non-IP network; and

transmitting the data via the wireless network;

if the data cannot be transmitted via the wireless network;

determining if an alternate route to the mobile routing device exists;

forwarding the data to an alternate Network Interface, if an alternate route exists;

translating the data to a format compatible with the alternate wireless network, if the alternate wireless network is a non-IP network; and

transmitting the data via the alternate wireless network;

wherein the determining, forwarding, translating and transmitting repeat until the data is successfully transmitted or no alternate routes exist.

19. The method of claim 13, in which the forwarding to the client device further comprises:

receiving the data at a router network adapter;

translating the data from a format compatible with the wireless network into an IP format, if the wireless network is a non-IP network;

determining whether the end point address is known locally;

forwarding the data to a client router network adapter, when the address is known locally; and

transmitting the data to the client device.

20. A Host Network Server that communicates with at least one mobile routing device via a plurality of wireless networks, the Host Network Server comprising:

a Router Manager that selects at least one of the wireless networks for data transmission based upon an end point address identifying the mobile routing device, the selected wireless network being identified by a gateway address; and

a plurality of Network Interfaces, each Network Interface interfacing with one of the wireless networks to send and receive data from the wireless network, each Network Interface converting data to and from a format associated with the wireless network when the wireless network format is different from an internal format.

21. The Host Network Server of claim 20, further comprising a route table that associates each end point address with at least one gateway address,

wherein the Host Network Server determines a wireless network to use for sending data to each end point address based upon a lookup in the route table.

22. A data routing system for routing data over at least one of a plurality of wireless networks, comprising:

a Host Network Server residing on a Local Area Network, the Host Network Server comprising a Router Manager that selects at least one of the wireless networks for data transmission based upon an end point address corresponding to a client device associated with the mobile routing device, the selected wireless network being identified by a gateway address, and a plurality of host Network Interfaces, each host Network Interface interfacing with one of the wireless networks to send and receive data from the wireless network;

a mobile routing device comprising a plurality of router network adapters, each router network adapter interfacing with one of the wireless networks to send and receive data from the wireless network and having a gateway address, associated with the wireless network, that the Host Network Server uses to send data to the mobile routing device, and at least one client router network adapter that interfaces with the at least one client device, each client router network adapter having an end point address that a sending application uses to send data to the client device;

wherein the sending application sends data to the client device via the Host Network Server, via at least one of the wireless networks and via the mobile routing device, using only the end point address so that the sending application is

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unaware of the wireless networks used to transport the data and the corresponding gateway addresses.

23. A computer readable medium storing a computer program that routes data between a Host Network Server and a client device associated with a mobile routing device over at least one of a plurality of wireless networks, the program comprising:

identifying the client device and a corresponding end point address;

forwarding the data to the Host Network Server using the end point address;

receiving the data at the Host Network Server;

ascertaining a gateway address corresponding to the end point address, the gateway address being associated with a selected wireless network that was selected for communicating with the mobile routing;

forwarding the data to the mobile routing device via the selected wireless network using the gateway address; and

forwarding the data from the mobile routing device to the client device based upon the end point address.